U.S. Department of Energy
ARGONNE NATIONAL LABORATORY
ARGONNE-WEST P.O.Box2528,IdahoFalls,Idaho 83403-2528 Telephone 208/533-7399

WAG 9

SITE CODE: ANL-20

Septic Tank and Leach Field by 793

TheUniversityofChicago

Photo 20: Septic Tank and Leach Field By 793

INITIAL ASSESSMENT FORM

I. SITE NAME AND LOCATION

01 SITE NAME	02 ADDRESS
Septic Tank and Leach Field by 793	Idaho National Engineering Laboratory (INEL)

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY
Scoville	Idaho	83403	Bingham

09 COORDINATES: NORTH	EAST	07 COUNTY CODE	08 CONG. DIST.
703,710	369,990	2	2nd

10 DIRECTIONS TO SITE (Starting from nearest public road) West of Idaho Falls, Idaho on U.S. Highway 20 for 30 miles (48 km) then 4 miles (6 km) north on Taylor Blvd.

II. OWNER/OPERATOR

01 OWNER (If known)	02 STREET ADDRESS		
Department of Energy (DOE)	785 DOE Place		
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 TELEPHONE NUMBER**
Idaho Falls	Idaho	83402	(208) 526-1122
07 OPERATOR (If known)	**08 STREET ADDRESS**		
Argonne National Laboratory	Taylor Blvd.		
09 CITY	**10 STATE**	**11 ZIP CODE**	**12 TELEPHONE NUMBER**
Scoville	Id.	83403	208-526-7625

III. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION __ YES X NO DATE __/__/__

02 SITE STATUS (Check one)

X A. Active SWMU __ B. Inactive __ C. Unknown

03 YEARS RECEIVED HAZ WASTE

None / __ Unknown

Start Stop

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
See Waste Information Section

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
See Hazardous Conditions and Incidents Section

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Org.)	03 TELEPHONE NUMBER
Clifford Clark	DOE-ID	(208) 526-1122

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORG.	07 TELEPHONE NUMBER
L. C. Witbeck	ANL-W	Safety, Security & Safeguards	208-526-7537

08 DATE
10 / 05 / 86
Mon Day Year

01 PHYSICAL STATES (Check all that apply)

__A. Solid
__B. Powder Fines
x C. Sludge
__D. Other _____
__E. Slurry
X F. Liquid
__G. Gas

02 WASTE QUANTITY AT SITE

TONS _____
CUBIC YARDS 4.95
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

__A. Toxic
__B. Corrosive
__C. Radioactive
__D. Persistent
__E. Soluble
__F. Infectious
__G. Flammable
__H. Ignitable
__I. Highly Volatile
__J. Explosive
__K. Reactive
__L. Incompatible
X M. Not Applicable

II. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT	COMMENTS
SLU	Sludge	N/A	N/A	N/A
OLW	Oily Waste			
SOL	Solvents			
PSD	Pesticides			
OCC	Other organic chemicals			
IOC	Inorganic chemicals			
ACD	Acids			
BAS	Bases			
MES	Heavy metals			

III. HAZARDOUS CONSTITUENTS

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STOR/DISP METHOD	05 CONC.	06 MEASU.
N/A	N/A	N/A	N/A	N/A	N/A

IV. SOURCES OF INFORMATION

Use specific references, e.g., state titles, sample analysis reports, etc

Site inspections, personnel interviews, process records, laboratory records.

I. HAZARDOUS CONDITIONS AND INCIDENTS

01 __ B. SURFACE WATER CONT. 02 __ OBSERVED (Date _____) __ POTENTIAL
03 NARRATIVE DESCRIPTION: __ ALLEGED

Not Applicable

01 __ C. CONTAMINATION OF AIR 02 __ OBSERVED (Date _____) __ POTENTIAL
03 POULATION POTENTIALLY AFFECTED 5 04 NARRATIVE DESCRIPTION __ ALLEGED

Not Applicable

01 __ D. FIRE/EXPLOSIVE CONDITIONS 02 __ OBSERVED (Date _____) __ POTENTIAL
03 POPULATION POTENTIALLY AFFECTED 5 04 NARRATIVE DESCRIPTION __ ALLEGED

Not Applicable

01 __ E. DIRECT CONTACT 02 __ OBSERVED (Date _____) __ POTENTIAL
03 POPULATION POTENTIALLY AFFECTED 5 04 NARRATIVE DESCRIPTION __ ALLEGED

Not Applicable

01 __ F. CONTAMINATION OF SOIL 02 __ OBSERVED (Date _____) __ POTENTIAL
03 NARRATIVE DESCRIPTION: __ ALLEGED

Not Applicable

01 __ G. DRINKING WATER CONTAMINATION 02 __ OBSERVED (Date _____) __ POTENTIAL
03 NARRATIVE DESCRIPTION: __ ALLEGED

Not Applicable

HAZARDOUS CONDITIONS AND INCIDENTS

I. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 __ J. DAMAGE TO FLORA 02 __ OBSERVED (Date _____) __ POTF' A:
04 NARRATIVE DESCRIPTION: __ ALI

Not Applicable

01 __ K. DAMAGE TO FAUNA 02 __ OBSERVED (Date _____) __ POTENTIA:
04 NARRATIVE DESCRIPTION: (include name(s) of species) __ ALLEGED

Not Applicable

01 __ L. CONTAMINATION OF FOOD CHAIN 02 __ OBSERVED (Date _____) __ POTENTIAI
04 NARRATIVE DESCRIPTION: __ ALLEGED

Not Applicable

01 __ M. UNSTABLE CONTAINMENT OF WASTES 02 __ OBSERVED (Date _____) __POTENTIAI
(SPILL RUNOFF, STANDING LIQUIDS/LEAKING DRUMS)
03 NARRATIVE DESCRIPTION: __ ALLEGED

Not Applicable

01 __ N. DAMAGE TO OFFSITE PROPERTY 02 __ OBSERVED (Date _____) __ POTENTIAI
04 NARRATIVE DESCRIPTION: __ ALL

Not Applicable

01 __ O. CONTAMINATION OF SEWERS,STORM 02 __ OBSERVED(Date _____) __ POTENTIAI
DRAINS, WWTPs
04 NARRATIVE DESCRIPTION: __ ALLEGED

Not Applicable

01 __ P. ILLEGAL/UNAUTHORIZED DUMPING 02 __ OBSERVED (Date _____) __ POTENTIAI
04 NARRATIVE DESCRIPTION: __ ALLEGED

Not Applicable

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLEGED HAZARDS

None

III. COMMENTS None

IV. SOURCES OF INFORMATION (List specific references, e.g., state files, sample analysis, reports) ANL-We
Site inspections, personnel interview, disposal quantity records, Installation Assessment Report, USGS Report IDO-22053 TID-4500 The Influence of Liquid Waste Disposal on the Geochemistry of Water at the NRTS.

PRIORITY RANKING SYSTEM

I. GENERAL FACILITY INFORMATION

FACILITY NAME: Septic Tank and Leach Field by 793

LOCATION: Idaho National Engineering Laboratory

POINT OF CONTACT: NAME: Argonne National Laboratory-West

ADDRESS: Scoville, Idaho 83403

PHONE: 526-7625

REVIEWER: Michael J. Holzemer DATE: 10/5/86

II. GENERAL FACILITY DESCRIPTION

GENERAL DESCRIPTION OF THE FACILITY: (For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

The septic tank and leach field receives wastes from the restroom associated with 793. This includes a sink, floor drains and toilet. This system was installed in 1983 and prior to this no sanitary waste system existed for the building. There is no chemistry laboratory associated with this building.

III. SCORES

SM = 0 (Sgw= 0 Ssw= 0 Sa= 0)

SFE = 0

SDC = 0

GROUND WATER ROUTE WORKSHEET

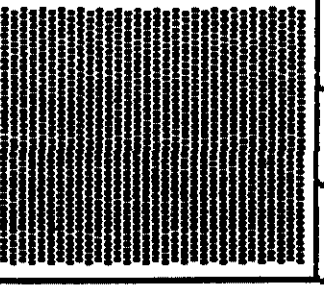
RATING FACTOR	ASSIGNED VALUE (Circle one)	MULTI-PLIER	SCORE Ø	MAX. SCORE	REF. Section
					3.2
1.ROUTE CHARACTERISTICS					
Depth to Aquifer of Concern	(0) 1 2 3	2	0	6	
Net Precipitation	(0) 1 2 3	1	0	3	
Permeability of the Unsaturated Zone	0 1 2 (3)	1	3	3	
Physical State	0 1 2 (3)	1	3	3	
Total Route Characteristics Score			6	15	
2.CONTAINMENT	(0) 1 2 3	1	0	3	3.3
3.WASTE CHARACTERISTICS					3.4
Toxicity/Persistence	(0) 3 6 9 12 15 18	1	0	18	
Hazardous Waste Quantity	(0) 1 2 3 4 5 6 7 8	1	0	8	
Total Waste Characteristics Score			0	26	
4. Multiply lines 1 x 2 x 3			0	1170	
5. Divide line 4 by 1170 and multiply by 100		Sgw=	0		

SURFACE WATER ROUTE WORKSHEET

RATING FACTOR	ASSIGNED VALUE (Circle one)	MULTI-PLIER	SCORE Ø	MAX. SCORE	REF. Sectio
					4.2
1.ROUTE CHARACTERISTICS					
Facility Slope and Intervening Terrain	(0) 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall	0 (1) 2 3	1	1	3	
Distance to Nearest Surface Water	(0) 1 2 3	2	0	6	
Physical State	0 1 2 (3)	1	3	3	
Total Route Characteristics Score			4	15	
2.CONTAINMENT	(0) 1 2 3	1	0	3	4.3
3.WASTE CHARACTERISTICS					4.4
Toxicity/Persistence	(0) 3 6 9 12 15 18	1	0	18	
Hazardous Waste Quantity	(0) 1 2 3 4 5 6 7 8	1	0	8	
Total Waste Characteristics Score			0	26	
4. Multiply lines 1 x 2 x 3			0	1170	
5. Divide line 4 by 1170 and multiply by 100		Ssw=	0		

AIR ROUTE WORKSHEET

RATING FACTOR	ASSIGNED VALUE (Circle one)	MULTI-PLIER	SCORE	MAX. SCORE	REF Sect.
1.HISTORIC RELEASE	⓪ 45	1	○	45	5.1
Date and Location: See attached supplement pages					
If line 1 is 0, the Sa = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.					
2.WASTE CHARACTERISTICS					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				20	
3.TARGETS					5.3
Population within 4-mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
Total Target Scores				39	
4. Multiply lines 1 x 2 x 3			○	35100	
5. Divide line 4 by 35100 and multiply by 100 Sa = ○					

	S	S^2
GROUNDWATER ROUTE SCORE (Sgw)	O	O
SURFACE WATER ROUTE SCORE (Ssw)	O	O
AIR ROUTE SCORE (Sa)	O	O
$Sgw^2 + Ssw^2 + Sa^2$		O
$SQR(Sgw^2 + Ssw^2 + Sa^2)$		O
$SQR(Sgw^2 + Ssw^2 + Sa^2)/1.73 = SM$		O

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: As briefly as possible, summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

FACILITY NAME: Septic Tank and Leach Field by 793

LOCATION: Argonne National Laboratory-West/Idaho National Engineering Laboratory

DATE SCORED: 10/5/86

PERSON SCORING: Michael J. Holzemer

PRIMARY SOURCE(S) OF INFORMATION:

1. Personnel interviews
2. System drawing
3. 40 CFR 300, App. A
4. Sax, "Dangerous Properties of Industrial Materials", sixth edition

FACTORS NOT SCORED DUE TO INSUFFICIENT INFORMATION:

COMMENTS OR QUALIFICATIONS:

There is approximately five employees who routinely work in this facility

1. OBSERVED RELEASE - Undertake Corrective Action

Contaminants detected (3 maximum):

No observed releases

Rationale for attributing the contaminants to the facility:

Not Applicable

2. ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:
Snake River Plain Aquifer

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

640 feet

Depth from the ground surface to the lowest point of waste disposal/ storage:

9 feet

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

9.07 inches

Mean annual lake or seasonal evaporation (list months for seasonal):

36 inches

Net precipitation (subtract the above figures):

- 26.93 inches

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

An interbedded sequence of basaltic lava flows and sedimentary deposits.

Permeability associated with soil type:

10^{-7} to 10^{-3} cm/sec

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

Sludge and liquid

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Prefabricated concrete septic tank and leaching field

Method of highest score:

The above containment has the highest score. Since this containment is an artifical means that is used to minimize or prevent a contaminant (raw sewage) from entering ground water, a score of zero was assigned. In addition, investigation through personnel interviews and operating procedures show no hazardous substances sent to this system.

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

Since the system is a sewage system and no hazardous substances, based on operation and personnel interviews, have been disposed into this system no compounds were evaluated except for sewage

Compound with highest score:

Sewage

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

None

Basis of estimating and/or computing waste quantity:

Contaminent score of zero

	Yes	No
Identifying Release		
1. Potential for Groundwater Releases from the Unit		
o Unit type and design		
- Does the unit type (e.g., land-based) indicate the potential for release?	X	___
- Does the unit have engineered structures (e.g., liners, leachate collection systems, proper construction materials) designed to prevent releases to groundwater?	___	X
o Unit operation		
- Does the unit's age (e.g., old unit) or operating status (e.g., inactive, active) indicate the potential for release?	___	X
- Does the unit have poor operating procedures that increase the potential for release?	___	X
- Does the unit have compliance problems that indicate the potential for a release to groundwater?	___	X
o Physical condition		
- Does the unit's physical condition indicate the potential for release (e.g., lack of structural integrity, deteriorating liners, etc.)?	___	X
o Locational characteristics		
- Is the unit located on permeable soil so the release could migrate through the unsaturated soil zone?	X	___
- Is the unit located in an arid area where the soil is less saturated and therefore a release has less potential for downward migration?	___	X
- Does the depth from the unit to the uppermost aquifer indicate the potential for release?	___	X

	Yes	No
- Does the rate of groundwater flow greatly inhibit the migration of a release from the facility?	___	X
- Is the facility located in an area that recharges surface water?	___	X
o Waste characteristics		
- Does the waste in the unit exhibit high or moderate characteristics of mobility (e.g., tendency not to sorb soil particles or organic matter in the unsaturated zone)?	___	X
- Does the waste exhibit high or moderate levels of toxicity?	___	X
2. Evidence of Groundwater Releases		
o Existing groundwater monitoring systems		
- Is there an existing system?	___	X
- Is the system adequate?	N/A	N/A
- Are there recent analytical data that indicate a release?	___	X
o Other evidence of groundwater releases		
- Is there evidence of contamination around the unit (e.g., discolored soils, lack of or stressed vegetation) that indicates the potential for a release to groundwater?	___	X
- Does local well water or spring water sampling data indicate a release from the unit?	___	X
Determining the Relative Effect of the Release on Human Health and the Environment		
1. Exposure Potential		
o Conditions that indicate potential exposure		
- Are there drinking water well(s) located near the unit?	X	___
- Does the direction of groundwater flow indicate the potential for hazardous constituents to migrate to drinking water wells?	X	___

1. OBSERVED RELEASE - Undertake Corrective Action

Contaminants detected in surface water at the facility or downhill from it (3 maximum):

No observed release

Rationale for attributing the contaminants to the facility:

Not Applicable

2. ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

Less than 3 percent

Name/description of nearest downslope surface water:

Big Lost River

Average slope of terrain between facility and above cited surface water body in percent:

Less than 3 percent

Is the facility located either totally or partially in surface water?

No

Is the facility completely surrounded by areas of high elevation?

Yes

1-year 24-Hour Rainfall in Inches

less than 2 inches

Distance to Nearest Downslope Surface Water

12 Miles

Physical State of Waste

Sludge and liquid

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

None, intervening terrain precludes runoff from entering surface water

Method with highest score:

Assigned containment score of zero per 40 CFR 300, App. A, Section 4.3, table 9

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

Sewage

Compound with highest score:

Sewage

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

None

Basis of estimating and/or computing waste quantity:

Containment score of zero

Checklist for Surface Water/Surface Drainage Releases

	Yes	No
Identifying Releases		
1. Potential for Surface Water/Surface Drainage Release from the Facility		
o Proximity to Surface Water and/or to Off-site Receptors		
- Could surface run-off from the unit reach the nearest downgradient surface water body?	___	X
- Could surface run-off from the unit reach off-site receptors (e.g., if facility is located adjacent to populated areas and no barrier exists to prevent overland surface run-off migration)?	___	X
o Release Migration Potential		
- Does the slope of the facility and intervening terrain indicate potential for release?	___	X
- Is the intervening terrain characterized by soils and vegetation that allow overland migration (e.g., clayey soils, and sparse vegetation)?	___	X
- Does data on one-year 24-hour rainfall indicate the potential for area storms to cause surface water or surface drainage contamination as a result of run-off?	___	X
o Unit Design and Physical Condition		
- Are engineered features (e.g., run-off control systems) designed to prevent release from the unit?	X	___
- Does the operational history of the unit indicate that a release has taken place (e.g., old, closed or inactive unit, not inspected regularly, improperly maintained)?	___	X
- Does the physical condition of the unit indicate that releases may have occurred (e.g., cracks or stress factures in tanks or erosion of earthen dikes of surface impoundments)?	___	X

	Yes	No
o Waste Characteristics		
- Is the volume of discharge high relative to the size and flow rate of the surface water body?	___	X
- Do constituents in the discharge tend to sorb to sediments (e.g., metals)?	___	X
- Do constituents in the discharge tend to be transported downstream?	___	X
- Do waste constituents exhibit moderate or high characteristics of persistence (e.g., PCBs, dioxins, etc.)?	___	X
- Do waste constituents exhibit moderate or high characteristics of toxicity (e.g., metals, chlorinated pesticides, etc.)?	___	X
2. Evidence of Surface Water/Surface Drainage Releases		
o Are there unpermitted discharges from the facility to surface water that require an NPDES or a Section 404 permit?	___	X
o Is there visible evidence of uncontrolled run-off from units at the facility?	___	X
<u>Determining the Relative Effect of the Release on Human Health and the Environment</u>		
1. o Are there drinking water intakes nearby?	___	X
o Could human and/or environmental receptors come into contact with surface drainage from the facility?	___	X
o Are there irrigation water intakes nearby?	___	X
o Could a sensitive environment (e.g., critical habitat, wetlands) be affected by the discharge (if it is nearby)?	___	X

1. OBSERVED RELEASE

Contaminants detected:

No observed release, assigned S_A score of zero

Date and Location of detection of contaminants:

Not Applicable

Methods used to detect the contaminants:

Not Applicable

Rationale for attributing the contaminants to the site:

Not Applicable

2. WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Not Applicable

Most incompatible pair of compounds:

Not Applicable

Toxicity

Most toxic compound:

Sewage

Hazardous Waste Quantity

Total quantity of hazardous waste:

None

Basis of estimating and/or computing waste quantity:

No hazardous waste associated with this system

	Yes	No
Identifying Releases		
1. Potential for Air Releases from the Facility		
o Unit Characteristics		
- Is the unit operating and does is expose waste to the atmosphere?	___	X
- Does the size of the unit (e.g., depth and surface area) create a potential for air release?	___	X
o Does the unit contain waste that exhibits a moderate or high potential for vapor phase release?		
- Does the unit contain hazardous constituents of concern as vapor releases?	___	X
- Do waste constituents have a high potential for volatilization (e.g., physical form, concentrations, and constituent-specific physical and chemical parameters that contribute to volatilization)?	___	X
o Does the unit contain waste and exhibit site conditions that suggest a moderate or high potential for particulate release?		
- Does the unit contain hazardous constituents of concern as particulate releases?	___	X
- Do constituents of concern as particulate releases (e.g., smaller, inhalable particulates) have potential for release via wind erosion, reentrainment by moving vehicles, or operational activities?	N/A	N/A
- Are particulate releases comprised of small particles that tend to travel off-site?	N/A	N/A
o Do certain environmental and geographic factors affect the concentrations of airborne contaminants?		
- Do atmospheric/geographic conditions limit constituent dispersion (e.g., areas with atmospheric conditions that result in inversions)?	X	___
- Is the facility located in a hot, dry area?	___	X

	Yes	No
2. Evidence of Air Releases		
o Does on-site monitoring data show that releases have occurred or are occurring (e.g., OSHA data)?	___	X
o Have particulate emissions been observed at the site?	___	X
o Have there been citizen complaints concerning odors or observed particulate emissions from the site?	___	X

Determining the Relative Effect of the Release on Human Health and the Environment

1. Exposure Potential		
o Is a populated area located near the site?	X	___

Checklist for Subsurface Gas Releases

	Yes	No
Identifying a Release		
1. Potential for Subsurface Gas Releases		
o Does the unit contain waste that generates methane or generates volatile constituents that may be carried by methane (e.g., decomposable refuse/volatile organic wastes)?	X	___
o Is the unit an active or closed landfill or a unit closed as a landfill (e.g., surface impoundments and waste piles)?	___	X
2. Migration of Subsurface Gas to On-site or Off-site Buildings		
o Are on-site or off-site buildings close to the unit?	X	___
o Do natural or engineered barriers prevent gas migration from the unit to on-site or off-site buildings (e.g., low soil permeability and porosity hydrogeologic barriers/liners, slurry walls, gas control systems)?	___	X
o Do natural site characteristics or man-made structures (e.g., underground power transmission lines, sewer pipes/sand and gravel lenses) facilitate gas migration from the unit to buildings?	___	X
Determining the Relative Effect of the Release on Human Health and the Environment		
1. Exposure Potential		
o Does building usage (e.g., residential, commercial) exhibit high potential for exposure?	___	X

1. CONTAINMENT

Hazardous substances present:
No score was computed because neither a state or local fire marshal have certified that the facility presents a significant fire or explosion threat to the public or to sensitive environments.

Type of containment, if applicable:

Not Applicable

2. WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

Not Applicable

Ignitability

Compound used:

Not Applicable

Reactivity

Most reactive compound:

Not Applicable

Incompatibility

Most incompatible pair of compounds:

Not Applicable

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

None

Basis of estimating and/or computing waste quantity:

No hazardous wastes associated with this system

3. TARGETS

Distance to Nearest Population

200 feet (Building 793)

Distance to Nearest Building

200 feet (Building 793)

Distance to Sensitive Environment

Distance to wetlands:

Greater than 100 feet

Distance to critical habitat:

Greater than 1/2 mile

Land Use

Distance to commercial/industrial area, if 1 mile or less:

The INEL is a research facility. There are no commercial/ industrial facilities within 1 mile.

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Greater than 2 miles

Distance to residential area, if 2 miles or less:

Greater than 2 miles

Distance to agricultural land in production within past 3 years, if 1 mile or less:

Greater than 1 mile

Distance to prima agricultural land in production within past 3 years, if 2 miles or less:

Greater than 2 miles

If a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

Big Southern Butte

Population Within 2-Mile Radius

688 employees at ANL-W

Buildings Within 2-Mile Radius

See attached plot plan

1. OBSERVED INCIDENT

Date, location, and pertinent details of incident:

No observed incident

2. ACCESSIBILITY

Describe type of barrier(s):

Security guards and fence barrier

3. CONTAINMENT

Type of containment, if applicable:

Not applicable (greater than 2 feet of cover)

4. WASTE CHARACTERISTICS

Toxicity

Compounds evaluated:

Sewage[2]

Compound with highest score:

Sewage

5. TARGETS

Population within one-mile radius

688 employees at ANL-W

Distance to critical habitat (of endangered species)

Greater than 1 mile